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IN THE COURT OF APPEAL OF THE STATE OF CALIFORNIA

SECOND APPELLATE DISTRICT

DIVISION FIVE

LORI RANSOM,

Plaintiff and Respondent,

v.

CALAVERAS ASBESTOS, LTD.,

Defendant and Appellant.

B207018

(Los Angeles County Super. Ct. No. BC360406)

APPEAL from an order of the Superior Court of Los Angeles County, Edward A. Ferns, Judge. Affirmed.

Horvitz & Levy, Lisa Perrochet, Robert H. Wright; and Foley & Mansfield, Douglas G. Wah, Sandy U. Liu and Jennifer M. McCormick for Defendant and Appellant.

Paul & Hanley, Dean A. Hanley and Gloria C. Amell for Plaintiff and Respondent.

I. INTRODUCTION

Defendant, Calaveras Asbestos, Ltd., an asbestos supplier, appeals from a judgment on the sole ground there is insufficient evidence to support the jury's determination it should be apportioned 24 percent liability for lung cancer suffered by the decedent, Glade Cookus, on theories of negligence and strict liability. We affirm.

II. BACKGROUND

On October 2006, Mr. Cookus filed a personal injury action against defendant and others alleging that he has lung cancer due to asbestos exposure. According to the complaint, defendant had allegedly mined and supplied asbestos to manufacturers of cement pipe. Defendant answered the complaint asserting a number of affirmative defenses including that plaintiff's employers were sophisticated users (twenty-second) and were warned of dangers (forty-ninth). By the time of trial, the parties litigated a negligence and two strict products liability claims on theories of design defect and failure to adequately warn. At the time of trial, Mr. Cookus was still alive. Mr. Cookus was granted trial preference due to evidence that he was terminally ill and not expected to survive more than four to six months.

We state the evidence in a light most favorable to the judgment resolving all conflicts and drawing all reasonable inferences in favor of the Mr. Cookus, who prevailed at a jury trial. (*Sanchez-Corea v. Bank of America* (1985) 38 Cal.3d 892, 906-907; *Zanone v. City of Whittier* (2008) 162 Cal.App.4th 174, 177, fn. 1.) Mr. Cookus testified that he began working for Doty Brothers around 1958 doing maintenance work. Doty Brothers was a pipeline contractor that had been hired by Palos Verdes Water Service Company to install and service main waterlines. In 1960, he worked part-time for Doty Brothers and as a baseball player. At Doty Brothers, Mr. Cookus cleaned up "transite" or asbestos cement pipe millings and dust that were on the milling machine the company used to cut metal pipe. The machine speeded up the cutting, beveling, and milling

process of asbestos cement. Mr. Cookus cleaned up the milling machine for about one-half to two years.

In 1960, his job changed to a laborer laying pipe and cutting or milling pipe. In the 1960's, there was "quite a bit" of work installing pipeline and replacing mainlines in new subdivisions in Palos Verdes. After his baseball career ended, Mr. Cookus worked full time as a laborer installing and repairing main water lines. Mr. Cookus worked with Doty Brothers until 1971. He handled asbestos cement pipe 90 percent of the time. He used the saw on the milling machine to cut pipe every day from 1960 to 1971. During that period of time up to 1971, Mr. Cookus installed thousands of feet of pipe. About 90 to 95 percent of the pipe was manufactured by Johns-Manville and Certainteed. (As will be noted, defendant supplied asbestos to these two pipe manufacturers.) Sometimes, he would cut pipe in the trenches with air driven saws. The workers would be covered in white dust and their noses full of dust. Mr. Cookus described the amount of asbestos dust as follows: "[Y]ou looked like a ghost coming out of there. You would be blowing your nose the rest of the day. [Y]ou couldn't even take an air hose and hose yourself off. It just stayed in your clothes. But . . . the biggest part was trying not to open your mouth when you were working." No one told the workers to wear a respirator during that period of time. Mr. Cookus never saw any warning on any piece of pipe. If Mr. Cookus had been warned about the dangers associated with asbestos cement pipe, he would have been a firefighter. Mr. Cookus would not have been a pipefitter. No one from Johns-Manville, Certainteed, or any other organization ever sent Mr. Cookus any literature about the dangers.

In 1971, Mr. Cookus began working for Alex Robertson which was a pipeline company. Mr. Cookus became a pipefitter. He did the same kind of work that he had done at Doty Brothers. He used skill or cutoff saws and hand milling machines. Initially, Mr. Cookus did not work with much asbestos cement pipe when he went to work for Alex Robertson. Mr. Cookus principally performed fire hydrant installation but he did some repairs. On occasion, he worked with asbestos cement pipe. But most often he worked with ductile iron.

Mr. Cookus worked about 70 to 75 percent of the time with asbestos pipe between 1971 and 1976. While working with asbestos cement pipe, Mr. Cookus used an electric saw to cut pipe in a trench. Dust would blow all over the place. Mr. Cookus worked with the Alex Robertson Company in Palos Verdes until 1976 when he was transferred to Visalia. Between 1976 and 1978, Mr. Cookus worked basically in the field but did some paperwork. In 1978, Mr. Cookus began working more in the office, however, he would install pipe on occasion. About half of the pipe Mr. Cookus worked with from 1976 to 1978 was manufactured by Johns-Manville. The other half was produced by Certainteed.

In 1983, Mr. Cookus began working for West Valley Construction installing pipe and doing service work. About half of the pipe he worked with from 1983 to 1985 was from Johns-Manville. The other half was from Certainteed. There were new gas-driven cutoff saws that threw off twice as much dust. In 1985, he began working more in the office. Mr. Cookus retired in 1999.

Mr. Cookus began smoking in 1960 when began to play baseball. He smoked for about 25 years total quitting for a 10-year period. Mr. Cookus finally stopped smoking in 1999. He smoked about two packs of cigarettes a day over time. Mr. Cookus was diagnosed with lung cancer in 2003. Surgeons removed the upper lobe of his left lung. In July 2006, the cancer returned and attached to his chest cavity. Mr. Cookus was told he had asbestosis.

James Lawler worked with Mr. Cookus beginning in 1975 or 1976 until about the middle eighties. They installed water systems for California Water Service. California Water Service owned the water service in Visalia and Selma, California. The crew installed asbestos cement pipe. Beginning in 1975 and going through 1985 about 99 percent of the pipe was asbestos cement pipe from 4 inches to 12 inches. The crew, of which Mr. Cookus was a member, started out using Johns-Manville pipe. Eventually, the crew switched over to Certainteed pipe when West Valley "took over" from Alex Robertson. According to Mr. Lawler and two of Mr. Cookus' co-employees, their employer never warned the employees about the dangers of working with asbestos.

Harold Kahlen worked for Johns-Manville from 1948 to 1982. Mr. Kahlen worked at the Long Beach, California plant where asbestos cement pipe, water pipe, irrigation pipe, sewer pipe and other product lines were manufactured. He started working there as a junior industrial engineer. After several promotions, he became a quality control manager in 1959. Between 1970 and 1982, the Long Beach and Stockton plants actively produced asbestos cement pipe. Johns-Manville had a uniform process for drafting and implementing the manufacturing specifications across the company. The specifications established the formulation for the various products in transit pipe. If the need arose, a local manufacturer could obtain authorization to deviate from the manufacturing specifications.

Asbestos cement pipe had three components: asbestos; cement; and silicas. Johns-Manville used a "blend" of asbestos fibers. Johns-Manville did not use one brand of asbestos but a combination of blends and the formulation was spelled out in a manufacturing specification. The reason for the blend of fibers was that asbestos fibers gave the finished pipe product strength. A point value was established for each product line and a formulation of the different kinds of fibers was determined for the manufacturer of that pipe. Blue asbestos had a high point value and was used quite often. White or chrysotile asbestos was part of the composition of the blend for the asbestos cement pipe. During the period of time between 1960 and when Johns-Manville stopped manufacturing asbestos cement pipe, the product contained both blue and white asbestos.

The supply of asbestos cement pipe distributed in this state by Johns-Manville usually came from California. The pipe was manufactured in either Long Beach or Stockton. It was unusual for the pipe to come from outside California. The Long Beach plant distributed pipe to Southern California, south of Bakersfield. The Stockton plant distributed pipe to areas north of Bakersfield. A manufacturing specification controlled the recipe that would apply throughout a given year. It would apply until it was revised or changed by a subsequent manufacturing specification or an intervening deviation. The deviation, like the specification, was a recipe for the blend.

Mr. Kahlen examined records from the Stockton office for pertinent dates related to size 3-inch to 16-inch pipes which were distributed in the area where Mr. Cookus worked. Mr. Kahlen described particular specifications and deviations from the Stockton plant that contained defendant's fiber. Mr. Kahlen identified the date and percentages of defendant's fiber. To his knowledge, defendant's fiber was used in the Johns-Manville Stockton plant but not the Long Beach facility.

Mr. Kahlen described asbestos cement pipe manufactured at the Stockton plant which contained asbestos fibers produced by defendant beginning on March 23, 1976, and ending on March 16, 1981. There were a total of 44 manufacturing specifications and or deviations within the timeframe during which defendant's fibers were used. Defendant's fibers in the blend ranged as low as 7.8 percent and as high as 29.7 percent. There were three intervals from February 27, 1976, through March 18, 1981, when defendant's fibers were not used: a 2-month period from February 27, 1976, through April 30, 1976; a 25-day period beginning on June 16, 1978, and a 6-month period beginning on January 12, 1979.

Deposition testimony by Daryl Wilkinson was read to the jury. Mr. Wilkinson was the plant production superintendent for Johns-Manville from the later 1960's to 1981 at the Stockton plant. He became the plant manager in 1981. The Stockton plant had various suppliers: Jeffrey Mine, which was operated by Johns-Manville; Cassier Fiber; Cape Blue Fiber; and defendant. According to Mr. Wilkinson, Johns-Manville encouraged the use of Jeffrey Mine fiber. Defendant was the smallest supplier. However, defendant's mine was the closest one to Stockton. When Johns-Manville began using defendant's fiber in 1976, Mr. Wilkinson liked its performance.

James Greeley testified since 1959 he had worked for a company that was bought by Certainteed in 1962. Certainteed manufactured asbestos cement pipe. Mr. Greeley worked at the Santa Clara plant until it closed down in 1982. He remained employed by Certainteed at the Riverside plant until he retired in 1994. Around 1977, he became the general supervisor of the Santa Clara plant in charge of divisions that were involved with the production of pipe.

Phillip Templin, an industrial hygienist and certified asbestos consultant, testified about Mr. Cookus' exposure levels from a description of his work. Mr. Cookus' described his work at Doty Brothers. Based on that description, Mr. Templin expected that Mr. Cookus would have been exposed in the range of anywhere from dozens to hundreds of fibers per cubic centimeter of air. Mr. Templin defined the measurement as the equivalent of 100 fibers within the space of a sugar cube size of air. The use of a hand machine would make the exposures go down in the tenths of a fiber per cubic centimeter of air. The use of a large high-speed device such as the type used by plaintiff and his fellow crew members would make the exposures go towards the upper end of the range. Sweeping and shoveling the debris tend to be very dusty operations. Workers can also be exposed from being in an area where others are using asbestos cement pipe. When the workers are using power equipment, a large cloud of dust could move 15 or 50 feet from the operation and give a person a measurable exposure to asbestos. Mr. Templin testified an office worker "downstream" from the operation might receive a higher exposure to asbestos than the person doing the work. The dust on clothing is highly significant because it can become airborne and contaminate a worker's vehicle and residence. The vehicle and home then become sources of potential exposure. Asbestos exposure from settled dust under controlled conditions can be in the billions of fibers per square foot of clothing. According to Mr. Templin, asbestos has a few physical properties which make it readily transported by air currents such as its size. Unless abatement techniques are employed, asbestos will tend to remain where it is within a facility virtually indefinitely. Although it varies, the typical asbestos content of a piece of asbestos cement pipe is about 15 to 25 or 30 percent.

Mr. Templin testified there are two or three types of mineralogical asbestos typically in asbestos cement pipe. There is one constant called chrysotile asbestos and other varieties are most commonly crocidolite and occasionally amosite. Chrysotile is finer and very, very small in diameter. Most of the time, Chrysotile fibers cannot be seen even with an ordinary light microscope. Crocidolite is thin and fairly straight in appearance. Amosite has additional elements such as iron. Amosite fibers are thicker

than Chrysolite fibers. There is no distinction between those varieties in terms of their carcinogenic attention as it relates to lung cancer. For carcinogens, there is no definable of knowable safe level of exposure. During an average 8-hour workday, a person may inhale about 500 asbestos fibers total. Mr. Cookus would normally have inhaled 1 billion asbestos fibers within an 8-hour shift. Mr. Templin testified concerning a study examining Certainteed pipe where asbestos cement pipe was cut. In a 6 or 8 inch pipe with an asbestos content of 20 percent, the range was about the mid one hundreds to around 270 fibers per cubic centimeter. The study revealed the exposure levels were in the thousandths of fibers per cubic centimeter.

Dr. Samuel Hammar testified on behalf of Mr. Cookus. Dr. Hammar is a pathologist with an interest: in the pathology of lung disease; the pathology of cancer; the pathology of asbestos-related diseases; and techniques used to diagnose cancer. Asbestos causes: lung cancer; asbestosis; and asbestos-induced pleura disease. Asbestos also causes a rare type of cancer called mesothelioma. Asbestosis is a scarring of lung tissue. According to Dr. Hammar, Mr. Cookus suffered from emphysema and mild chronic obstructive disease. Mr. Cookus' smoking partly caused his lung cancer. Dr. Hammar testified that: an asbestos body is a fiber that has been coated by a cell called a macrophage with iron and protein; an asbestos fiber gets into the lung from breathing air that contains the fibers; and when they reach a certain area, the respiratory bronchiole, is where the fiber stops first. Macrophages originate in the bone marrow and circulate in the blood stream and enter various parts of body tissue through specimen, the lung, liver, spleen, and almost every place. A macrophage can encounter an asbestos fiber. When this occurs, the fiber is fully encased or coated. This coating or encasement is one of the body's defense mechanisms which tries to prevent the determined effect of exposure to asbestos.

Because there were so many asbestos bodies in Mr. Cookus' lung tissue, Dr. Hammar did not even count them. Dr. Hammar noted that other physicians had counted specimens from Mr. Cookus which found 22 asbestos bodies in 5.3 square centimeter of lung tissue which equated to 4.2 asbestos bodies per square centimeter. This is about

50,000 asbestos bodies per gram of wet lung tissue. Dr. Hammar had looked at 15,000 pathology specimens and concluded that Mr. Cookus's would be in the top 10 percent as most asbestos bodies in lung tissue. Dr. Hammar testified Mr. Cookus' tumors were caused by asbestos and cigarette smoke carcinogens.

Dr. Hammar explained that Mr. Cookus had scar tissue from the tumor that was resected in 2004 and which contained an asbestos body. In response to a question as to whether the scarring was the result of smoking or asbestos, Dr. Hammar replied: "Well, I would say that asbestos is probably the most potent agent there is in causing scarring of the lung. Does cigarette smoking cause scarring? Yes, it does. Could I say that cigarette smoking may not contribute to that? Probably not. But I would say this: that asbestos is a more potent scarring agent than cigarette smoking is." Dr. Hammar did the same test for the tumor found in 2006. There was an asbestos body in scar tissue. Dr. Hammar concluded "each and every occupational exposure to asbestos" that Mr. Cookus experienced was a substantial factor in increasing the risk of developing lung cancer and asbestosis. Dr. Hammar diagnosed Mr. Cookus with grade 1 and 2 asbestosis.

Dr. Barry Levy is a physician and epidemiologist. Epidemiology deals with the causes and patterns of disease in populations. Dr. Levy also specializes in occupational medicine which is a branch of medicine to diagnose, treat, and prevent work-related diseases and injuries. Dr. Levy testified Mr. Cookus' lung cancer was caused by both occupational exposure to asbestos and cigarette smoking. Dr. Levy further testified there "is a direct dose response relationship between asbestos and the risk of lung cancer" even when one takes smoking into account. But asbestos by itself increases the risk even in the absence of cigarette smoking.

Dr. Arnold Brody is a professor of molecular and biomedical sciences. He operates a science research laboratory which studies how asbestos injures the lungs and causes disease. He has a Ph.D. in cell biology. Dr. Brody described what happens if a person has cancer and is exposed to asbestos and cigarette smoke. When this occurs, the asbestos and the cigarette smoking synergize or combine to create a risk grater than either one alone. The cause of the cancer was exposure to both asbestos and cigarette smoke.

But in Dr. Brody's opinion, there is no way to pull one of the two sources as the sole cause of the cancer.

Defendant began supplying Certainteed with asbestos fiber around 1976. In 1979, Certainteed began putting warning labels on pipes about using abrasive disc saws. In 1985, Certainteed placed a warning on its pipe that read: "Asbestos cement pipe. Caution: Contains asbestos dust. Avoid cutting, drilling, breathing asbestos dust. Serious body harm including When cutting, machining and tapping always use recommended work practice. Refer to work practice guide furnished by manufacturer to your employer. Do not use abrasive disc saws." From 1978 through 1980, Certainteed received 20 to 25 short tons of defendant's fiber once every two weeks. A short ton is an American ton or 2,000 pounds. Defendant's invoices from February 3, 1981, through March 31, 1982, showed 20 to 25 tons allotments of its asbestos fiber at Certainteed's Santa Clara plant.

The jury returned a special verdict in Mr. Cookus's favor which found defendant liable for negligence and strict liability. The jury awarded \$1,444,100 in economic and \$2,888,200 in non-economic damages. The jury apportioned fault as follows: 15 percent to Mr. Cookus; 24 percent to defendant; and 61 percent to all others. On January 15, 2008, judgment was entered against defendant in the amount of \$1,638,239.86. The judgment consisted of \$945,071.86 in economic damages after accounting for pre-verdict settlements and Mr. Cookus' contributory fault. Further, the judgment consisted of \$693,168.00 in non-economic damages.

Defendant filed a new trial motion on February 11, 2008, challenging the 24 percent allocation of fault allocation on the ground it was against the weight of evidence. Defendant's new trial motion was denied by operation of law when the trial court failed to rule. (Code Civ. Proc., §660; *Sanchez – Correa v. Bank of America, supra*, 38 Cal.3d at p. 899.) Defendant filed a notice of appeal on April 3, 2008. We granted Mr. Cookus' request for priority. Prior to oral argument, Mr. Cookus died. Thereupon, Lori Ransom, Mr. Cookus' daughter and successor in interest, was substituted in as plaintiff.

III. DISCUSSION

A. Defendant's Fault Related Contentions

Defendant argues that the judgment must be reversed because there is insufficient evidence to support the 24 percent allocation of fault. Also, defendant argues that it is entitled to reversal based on sophisticated user and bulk supplier theories. Finally, defendant argues that a greater allocation of fault rested on Mr. Cookus' employers, the water companies, the pipe manufacturers,

Citing Scott v. County of Los Angeles (1994) 27 Cal. App. 4th 125, 147-148, defendant argues: the evidence shows that it contributed to Mr. Cookus' illness to a lesser degree than others; the jury should have apportioned its fault based on a "relatively small amount of asbestos fiber"; and this is because it purportedly supplied only 3 percent of Mr. Cookus' asbestos fiber dose. Defendant argues the jury did not take into account: Mr. Cookus' 41-year work history; his exposure to asbestos during various periods of time; the length of time defendant produced asbestos fiber; and the length of time Mr. Cookus had worked prior to defendant's first production of asbestos fibers. Defendant reasons it contributed to Mr. Cookus' exposure no more than 9 years of his 41 years while he was employed in the pipe installation business. This, according to defendant, is only about 22 percent of his work years. Defendant further contends that it supplied on average no more than 15 percent of the asbestos fibers to which Mr. Cookus was exposed; 10 percent for Johns-Manville and 20 percent for Certainteed pipes. Defendant then concludes: "Because others supplied 100 [percent] of the asbestos during 80 [percent] of [Mr. Cookus'] heavy, direct occupational exposure to asbestos, while [defendant] supplied only a 15 [percent] share in 20 [percent] of the years that [Mr. Cookus] laid asbestos cement pipe, [defendant] supplied no more than 3 [percent] of the asbestos fiber to which [Mr. Cookus] (15 [percent] x 20 [percent] = 3 [percent])."

As defendant concedes, a jury's apportionment of fault is subject to a substantial evidence assessment on appeal. (*Scott v. County of Los Angeles, supra*, 27 Cal.App.4th

at p. 147; Rosh v. Cave Imaging, Inc. (1994) 26 Cal. App. 4th 1225, 1234.) In Rosh, the Court of Appeal held: "As the court noted in *Hyatt v. Sierra Boat Co.* (1978) 79 Cal.App.3d 325, 346, the jury's power to apportion fault is as broad as its duty to resolve conflicts in the evidence and assess credibility: 'These same considerations apply to the jury's apportionment of fault under comparative negligence rules. Furthermore, the appellate court may not substitute its judgment for that of the jury or set aside the jury's finding if there is any evidence which under any reasonable view supports the jury's apportionment. [Citation.]' (See also *Metzger v. Barnes* (1977) 74 Cal.App.3d 6, 9-10.)" (Rosh v. Cave Imaging Systems, Inc., supra, 26 Cal.App.4th at p. 1234.) Our limited authority to set aside the jury's fault allocation was described in Brandon G. v. Gray (2003) 111 Cal.App.4th 29, 40-41: "[C]omparative negligence" does not lend itself to "the exact measurements of a micrometer-caliper." [Citations.] The court has also noted that juries are "fully competent to apply comparative fault principles. . . . " [Citations.] . . . [¶] As one commentator has noted, "[c]ourts in comparative negligence states are usually circumspect about altering determinations made by the jury. The courts will rarely disturb the jury's apportionment of negligence between parties or reverse findings for the plaintiff or defendant." [Citation.] [¶] This court reviews the jury's apportionment of fault under the substantial evidence standard. [Citation.] [T]he jury's power to apportion fault is as broad as its duty to resolve conflicts in the evidence and assess credibility: "These same considerations apply to the jury's apportionment of fault under comparative negligence rules. Furthermore, the appellate court may not substitute its judgment for that of the jury or set aside the jury's finding if there is any evidence which under any reasonable view supports the jury's apportionment. [Citation.]" [Citation.]" (See Rosh v. Cave Imaging Systems, Inc., supra, 26 Cal.App.4th at pp. 1233-1234.)

Under the applicable review standard, we disagree with defendant that the fault allocation was improper as a matter of law. This is because there was evidence from which a reasonable jury could allocate 24 percent of fault to defendant for Mr. Cookus' harm: he was employed over a period of years in an industry that used asbestos cement

pipe; beginning in 1976, his employers used pipes which contained asbestos fibers supplied by defendant; the pipe blends contained various levels of asbestos over a period of years ranging from 7.8 percent to 29.7 percent for Johns-Manville; from 1978 through 1980, Certainteed received 20 to 25 short tons of defendant's asbestos once every two weeks; and there was testimony that asbestos exposure was a cause of his cancer. This was sufficient evidence that defendant was a substantial contributing cause of Mr. Cookus' cancer.

Defendant argues its maximum allocation of fault is only 3 percent based on its previously described formula. However, allocation of fault by the trier of fact is not subject to exact mathematical computations. (See *Daly v. General Motors Corp.* (1978) 20 Cal.3d 725, 742. ["[t]he law consistently seeks to elevate justice and equity above the exact contours of a mathematical equation"]; *Bostick v. Flex Equipment, Inc.* (2007) 147 Cal.App.4th 80, 102-103 [same].) Apportionment of fault involves the trier of fact engaging in an equitable assessment of the evidence: "Since the comparative fault doctrine was first adopted in California in *Li v. Yellow Cab Co.* (1975) 13 Cal.3d 804, our Supreme Court has repeatedly acknowledged that it is designed to permit the trier of fact to consider all relevant criteria in apportioning liability. "[T]he . . . doctrine 'is a flexible, commonsense concept, under which a jury properly may consider and evaluate the relative responsibility of various parties for an injury (whether their responsibility for the injury rests on negligence, strict liability, or other theories of responsibility), in order to arrive at an "equitable apportionment or allocation of loss." (*Knight v. Jewett* (1992) 3 Cal.4th 296, 314[].)" (*Henry v. Superior Court* (2008) 160 Cal.App.4th 440, 461.)

Further, as plaintiff explains, defendant's calculus omits testimony concerning Mr. Cookus' additional exposure to asbestos. Defendant's calculus only takes into account Mr. Cookus' asbestos exposure while directly working with pipes. There was testimony Mr. Cookus was also exposed to asbestos while: working around others: supervising others' work; and in his car and home. These additional exposures occurred, according to the testimony, because asbestos would remain on workers' clothing and be carried away from job sites after the conclusion of the workday. Asbestos fibers would remain in

workers' homes over time. Defendant has not shown that jury's verdict was improper as a matter of law in the manner it apportioned fault.

Also, there is no merit to defendant's argument that it is entitled to a reversal based on sophisticated user and bulk supplier theories. (See *Johnson v. American Standard* (2008) 43 Cal.4th 56, 71 [sophisticated user]; *Arena v. Owens-Corning Fiberglass Corporation* (1998) 63 Cal.App.4th 1178, 1188-1189 [bulk supplier defense does not apply to asbestos].) These contentions were not raised during the trial. No jury instructions were requested on these defenses, nor were they argued to the jury. Hence, as plaintiff argues, they have been forfeited. (*Bardis v. Oates* (2004) 119 Cal.App.4th 1, 14; *Brown v. Boren* (1999) 74 Cal.App.4th 1303, 1316.) Because these issues were not raised at trial, there is an insufficient evidentiary record to demonstrate as matter of law that the fault allocation may be reversed on sophisticated user and bulk supplier theories. Thus, this is not a case where an issue may be resolved as matter of law; an exception to general forfeiture jurisprudence. (*In re S.B.* (2004) 32 Cal.4th 1287, 1293-1294; *Sheller v. Superior Court* (2008) 158 Cal.App.4th 1697, 1709.)

Finally, there is no merit to defendant's third argument that greater fault should have been assessed on Mr. Cookus' employers and others. This is a mere reiteration of its prior arguments concerning the jurors' fault allocation. These latter arguments are fact based disputes which were for the trier of fact to resolve.

B. Costs

Defendant asserts that if the judgment is reversed, the cost award must likewise be set aside. As noted, we have concluded the judgment may not be set aside. Thus, we need not address defendants' cost contention.

IV. DISPOSITION

The judgment is affirmed. Plaintiff, Lori Ransom, as the successor in interest to Glade Cookus, is awarded her costs on appeal from defendant, Calaveras Asbestos, Ltd.

NOT TO BE PUBLISHED IN THE OFFICIAL REPORTS

TURNER, P. J.

I concur:

ARMSTRONG, J.

I respectfully dissent.

I would reverse the judgment and the award of costs because there is not substantial evidence to support the jury's allocation of 24 percent of the fault to defendant Calaveras Asbestos, Ltd. (Calaveras). The trial court instructed the jury that it must make an apportionment of the responsibility of those whose negligence or fault was a substantial factor in causing plaintiff's harm. Although not discussed, it would appear that Calaveras had the burden of establishing that damages could be apportioned and the apportionment of damages. (See *Johns-Mansville Products Corp. v. Superior Court* (1980) 27 Cal.3d 465, 477-478, fn. 11; see Rest.2d Torts, § 433 B(2); *Sparks v. Owens-Illinois, Inc.* (1995) 32 Cal.App.4th 461, 476-477, fn. 11; *Lineaweaver v. Plant Insulation Co.* (1995) 31 Cal.App.4th 1409, 1417.) This court reviews a jury's apportionment of fault under the substantial evidence standard. (*Sparks v. Owens-Illinois, Inc., supra, 32* Cal.App.4th at p. 476 [In asbestos case, "[t]he substantial evidence standard of review also applies to the jury findings on the issue of causation [citation], and its allocation of fault among concurrent or alternative tortfeasors. [Citations.]"]; *Scott v. County of Los Angeles* (1994) 27 Cal.App.4th 125, 147.)

Apportionment

There seems to be no dispute that there is sufficient evidence that each and every occupational exposure by plaintiff to asbestos between 1958 and 1985, including Calaveras's asbestos, was a substantial factor in causing his lung cancer, along with cigarette smoking. There is no contention that an allocation of damages should not have been made in this case. (*Rutherford v. Owens-Illinois, Inc.* (1997) 16 Cal.4th 953, 958 ["And although a defendant cannot escape *liability* simply because it cannot be determined with medical exactitude the precise contribution that exposure to fibers from defendant's products made to plaintiff's ultimate contraction of asbestos-related disease, all joint torfeasors liable as named defendants will remain entitled to limit *damages*

ultimately assessed against them in accordance with established comparative fault and apportionment principles"]; *Gutierrez v. Cassiar Mining Corp.* (1998) 64 Cal.App.4th 148, 151-152 [in asbestos case the jury assigns percentages of comparative fault to the supplier and manufacturer of the asbestos, and 23 percent to "all others"]; cf. CACI No. VF-402 (2006).)

In the comments to section 8 of the Restatement Third of Torts: Apportionment of Liability, the American Law Institute has pointed out some of the difficulties in the apportionment of "responsibility." Comment a states in part: "Responsibility' is a general and neutral term. Assigning shares of 'fault' or 'negligence' can be misleading because some causes of action are not based on negligence or fault. Assigning shares of 'causation' wrongly suggests that indivisible injuries jointly caused by two or more actors can be divided on the basis of causation. Assigning shares of 'culpability' could be misleading if it were not made clear that 'culpability' refers to 'legal culpability,' which may include strict liability." Comment c states in part: "The relevant factors for assigning percentages of responsibility include the nature of each person's risk-creating conduct and the comparative strength of the causal connection between each person's risk-creating conduct and the harm. The nature of each person's risk-creating conduct includes such things as how unreasonable the conduct was under the circumstances, the extent to which the conduct failed to meet the applicable legal standard, the circumstances surrounding the conduct, each person's abilities and disabilities, and each person's awareness, intent, or indifference with respect to the risks. The comparative strength of the causal connection between the conduct and the harm depends on how attenuated the causal connection is, the timing of each person's conduct in causing the harm, and a comparison of the risks created by the conduct and the actual harm suffered by the plaintiff."

Allocations are particularly difficult in asbestos cases. "Asbestos products, in particular, are capable of causing varying degrees of injury as a result of the nature of the products themselves and the nature and duration of exposure. Moreover, there are hundreds of different kinds of asbestos products, with 'wide variation in form and

toxicity' which distinguishes asbestos cases from some other types of products cases. (*Rutherford v. Owens-Illinois, Inc.* (1997) 16 Cal.4th 953, 972 [67 Cal.Rptr.2d 16, 941 P.2d 1203].) "Asbestos-containing products do not create similar risks of harm because there are several varieties of asbestos fibers, and they are used in various quantities, even in the same class of product." [Citation.]' (*Ibid.*)" (*Arena v. Owens-Corning Fiberglas Corp.* (1998) 63 Cal.App.4th 1178, 1198.)

One authority noted as follows: "Responsibility is not apportioned, either between a plaintiff and defendant or between defendants, by an allocation of physical causation, but rather by allocating fault, which cannot be scientifically measured; thus, allocation of one defendant's fault for three months of exposure to its asbestos product, determined by multiplying the percentage of defendants' total liability by the percentage of the particular defendant's liability among the defendants, was proper despite the defendant's argument that its product could not have physically caused its allotted percentage of the plaintiff's injuries. (Fn. citing *Ingram v. Acands, Inc.* (9th Cir. 1992) 977 F.2d 1332 (applying Oregon Law).) However, in an action to recover personal damages arising from a naval shipyard worker's occupational exposure to asbestos, in which the case proceeded to trial against two of the original 22 defendants who allegedly manufactured, distributed or supplied asbestos-containing products to which the plaintiff was exposed, the absence of evidence as to the relative amounts of asbestos dust the plaintiff inhaled from the various asbestos-containing products to which he was allegedly exposed barred apportionment on the basis of relative causal fault and required apportionment to be made among any joint tortfeasors on a pro rata basis. (Fn. citing *Ball v. Johns-Manville Corp.* (Pa. Super. 1993) 625 A.2d 650 [abrogated in part, *Baker v. AC&S*, *Inc.* (Pa. 2000) 755 A.2d 664].)" (11 American Law of Products Liability 3d (2002) § 122:50, p. 88.)

Time and Extent of Exposure

Plaintiff worked with asbestos from 1958 to 1985, with most of his exposure being for about 20 years during that period. Calaveras produced asbestos fiber during four of

the years in which plaintiff was most heavily exposed to asbestos. These were the years 1976-1978 and 1983-1985.

From 1958 to 1960, plaintiff worked with asbestos pipes part time. From about 1960 to 1976, he worked full time in the field as a laborer and pipefitter for pipeline contractors and was exposed to asbestos on a daily basis. While he was working for a contractor from 1960 to 1971, he cut pipe that generated a great deal of dust. He testified, "You know, you just got in and did the work and got it done. And you would come out of there, and you would just be covered in white dust. You know, you looked like a ghost coming out of there. Your nose would be full of dust. You would be blowing your nose the rest of the day. And you couldn't even take an air hose and hose yourself off. It just stayed in your clothes, also. But, you know, I think you know the biggest part was trying not to open your mouth when you were working."

Plaintiff testified that when he took his new job in 1971, he did the same work as before, and that work generated the same asbestos dust as in the prior job. He did use a different tool, but said, "It would blow dust all over the place. I mean the banks would be white. You'd be white. You couldn't breathe."

He spent only part time working in the field during 1978-1983. In 1978, plaintiff's responsibilities as superintendent began to occupy the majority of his time. "I was overwhelmed with paperwork, so I worked my way just to try [sic] strictly in the office. But I'd go back out and help guys. If they were short a man on the crew, I would go out and help" As superintendent, he spent about 75 percent of his time doing paperwork, checking potential job sites, and meeting with utility company representatives. About once every two or three months, plaintiff would work in the field himself, assisting a crew.

In 1983, West Valley Construction (West Valley) opened a yard in Visalia, and hired plaintiff. Plaintiff resumed performing field work—working with the same pipe product supplied by Johns-Mansville and Certainteed. Plaintiff testified that when he was out in the field, the type of work he did prior to 1976 and after 1983 was the same. Plaintiff worked for West Valley first as a pipe fitter and then as a foreman. In both

positions plaintiff was responsible for laying, cutting, and milling asbestos cement pipe. The work was no different from plaintiff's previous field work for Robertson. He did use a different tool that generated twice as much dust.

In 1985, plaintiff's immediate supervisor assumed responsibility for running West Valley's Bakersfield yard and began spending about 3 or 4 days a week in Bakersfield. Plaintiff stopped working in the field laying asbestos cement pipe and instead handled office work, visited potential job sites, and obtained bid information.

Although different types of asbestos may be more lethal than others, the evidence in this case indicated there were no distinctions in the effect of the types of asbestos to which plaintiff was exposed. There was evidence here that from an industrial hygienist's standpoint, there was no distinction between the varieties of asbestos as relates to cancer. Each and every occupational exposure plaintiff had to asbestos between 1958 and 1985 was a substantial factor in causing his lung cancer.

Pipe Suppliers

Johns-Manville operated a plant in Stockton, California that manufactured the asbestos cement pipe for distribution in Northern California and made that pipe from a blend of asbestos fibers supplied by various companies. In 1976, it added Calaveras asbestos fiber to this blend. Johns-Manville itself operated the world's biggest open pit mine and obtained much of its asbestos from this mine. Certainteed also manufactured asbestos cement pipe for distribution in Northern California, used a blend of asbestos fibers supplied by a number of suppliers, and also added Calaveras asbestos fibers to the pipes in 1976.

From 1960 to 1971, Johns-Manville manufactured 90% or 95% of the asbestos cement pipe that plaintiff installed. From at least 1971 forward, plaintiff began to work with Certainteed pipe. But during the first 16 years of plaintiff's full-time work, up to 1976, none of the pipe contained asbestos from Calaveras. Calaveras began mining, milling, selling chrysotile asbestos fiber in January 1976. Calaveras sold asbestos fiber to, inter alia, the asbestos cement pipe manufacturers Johns-Manville and Certainteed. It

was not until 1976 that Calaveras supplied asbestos to Johns-Manville and Certainteed. And it was those companies that manufactured asbestos cement pipe upon which plaintiff worked at his position with the Alex Robertson Company (Robertson).

No Distinction in Culpability

As noted, the Calaveras asbestos was no more toxic than any of the others. Calaveras always included warnings on its packaging—with the cancer warnings beginning in 1981—and was inspected by federal, state, and local authorities. There was evidence that the harmful effects of asbestos were known prior to any of the events in this case, and there was no evidence that Calaveras had any exclusive knowledge of the risks. There was evidence of published reports on the health risks of asbestos before 1960. Accordingly, there is no evidence that Calaveras was any more culpable or unreasonable or blameworthy for its distribution of asbestos than any other company that caused plaintiff's injuries. Thus, an allocation of damages could be made would have to be based only on the amount of asbestos to which plaintiff was exposed.

Calaveras Participation

Johns-Manville's Stockton plant supplied Robertson with the asbestos pipe. The evidence is that from February 1976, through March 1981, the Johns-Manville Stockton plant's standard specifications for asbestos cement pipe included a blend of fiber containing 10 percent Calaveras fiber. At times, the plant deviated from these specifications, with the deviating blends containing from 7.8 percent to 29.7 percent Calaveras fiber. But even with these deviations, the Stockton plant used an average of only 10 percent Calaveras asbestos fiber in the blend for its asbestos cement pipe after 1976. Moreover, the use of Calaveras fiber was intermittent.

Certainteed operated a plant in Santa Clara that manufactured asbestos cement pipe and distributed it to Robertson. Beginning in about 1976, Certainteed product

There is a reference to the initial time being February 1977.

included Calaveras asbestos fiber. It was estimated that another manufacturer supplied to Certainteed four times as much asbestos as did Calaveras; another company supplied half of what Calaveras supplied; and other companies also supplied some of the asbestos to Certainteed. This suggests that the percentage of Calaveras asbestos used by Certainteed was low. Calaveras ceased operations in December 1987. By January or February 1988, it had sold the balance of its inventory.

Allocation in This Case

As noted, there is no distinction between the types of asbestos and the propensity to cause cancer. There was no evidence regarding the quantity of exposure—fiber count—during different parts of plaintiff's career. Indeed, there was evidence that such a calculation could not be made.

There was no evidence that suggested that a small dose of asbestos from one source contributed disproportionately to plaintiff's disease. There was evidence that from a potency or cancer causing effect, no distinction could be made between the types of asbestos in the pipes with which plaintiff worked. There was expert testimony that no fiber count attributable to plaintiff's exposure could be made. Plaintiff's greatest exposure to asbestos consisted of the approximately 20 years he worked full time dealing with asbestos pipe—1960 to 1978 and 1983 to 1985. Calaveras sold asbestos from 1976 to 1988. Thus it sold asbestos to which plaintiff was significantly exposed only during the years 1976 to 1978 and 1983 to 1985, or about four years. Generally, Calaveras supplied an average of 10 to 15 percent of the asbestos fiber for the pipes on which plaintiff worked. Plaintiff's full time work on the asbestos pipe was about 20 years, but he worked part time with it for two years prior to 1960. Although he was a full time superintendent during the period 1978 to 1983, he sporadically would go out in the field. Thus plaintiff had significantly less exposure to the product containing Calaveras asbestos from 1978 to 1983.

Even allowing for some of the part time exposure and the possible increased exposure during the 1983 to 1985 period (which can be attributed to the equipment he

was using), based on the evidence, Calaveras could not be responsible for 24 percent of the fault. The jury assigned 15 percent of the fault to plaintiff—presumably for smoking cigarettes and drinking alcohol. This would mean that Calaveras was apportioned 28 percent of the fault of those who were responsible for plaintiff's asbestos exposure (not even including the pipe suppliers). Plaintiff was exposed to Calaveras's asbestos in four out of the 20 years in which plaintiff had full time exposure to asbestos and four years out of the six years in which he had little exposure to asbestos. With the Calaveras percentage of the asbestos being at most about fifteen percent, I can see no evidence suggesting that Calaveras's contribution on a percentage of exposure basis could be more than a single digit figure—and probably a low single digit figure.

Plaintiff's attorney never presented to the jury any way of allocating an amount of damages to Calaveras, much less the 24 percent allocation. And in plaintiff's brief on appeal and oral argument, plaintiff made no effort to, and could not, point to any evidence that supported the 24 percent figure. Plaintiff simply argues that it is up to the jury. But that is no answer to the requirement that there be substantial evidence to support that jury conclusion. I submit there is no such evidence.

Plaintiff had the opportunity to present some evidence or make some argument upon which a 24 percent allocation could be made. As he failed to do so, it seems to me that there is not substantial evidence to support the damage allocation. Accordingly, I would reverse the judgment.

MOSK, J.